

CALIFORNIA ACADEMY OF SCIENCES

FOURTH SERIES

VOL. XII, No. 2, pp. 27-29

JANUARY 2, 1923

II

NEW SPECIES OF HYNوبيUS FROM JAPAN

BY E. R. DUNN

Smith College

The following diagnoses record seven new species of *Hynobius* from Hokkaido, Hondo, Kyushu, and three of the islands in the Korean straits. Full description will appeal in a revision of the family *Hynobiidae* which I am preparing.

My thanks are due to the California Academy of Sciences through Dr. John Van Denburgh for the loan of a very large collection of these animals.

1. *Hynobius retardatus* Dunn, new species

Diagnosis: A *Hynobius* with long, flat tail; toes 5; very long; vomerine tooth series very short. Gray-brown, a darker lateral stripe. Transforming at a large size.

Type: No. 35928, Mus. Cal. Acad. Sci., a young male, collected August 30, 1911, by V. Kuhne.

Type-locality: Noboribetsu, Iburi Province, Hokkaido.

Remarks: This well-marked species apparently represents the genus on Hokkaido.

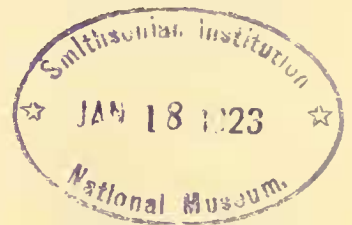
2. *Hynobius kimuræ* Dunn, new species

Diagnosis: A *Hynobius* with a short, thick tail; toes 4; very long vomerine series. Purplish-brown; small, light flecks over whole upper surface.

Type: No. 8546, Mus. Comp. Zool., an adult female, collected in 1920, by Dr. Kimura and Dr. H. H. Wilder.

Type-locality: Mt. Heizan, near Kyoto, Hondo.

Remarks: An adult male, No. 27258, Mus. Cal. Acad. Sci., from Hida Province, Hondo, agrees in general with the type. This species is allied to *H. naevius*.



3. *Hynobius stejnegeri* Dunn, new species

Diagnosis: A *Hynobius* with a short, thick tail; toes 5; very long vomerine series. Chocolate-brown above, thickly marbled all over with rather large lighter blotches.

Type: No. 23901, U. S. Nat. Mus., an adult female, collected by Mr. Nakagawa.

Type-locality: Kumamoto, Higo Province, Kyushu.

Remarks: Closely allied to *H. navius* and *H. kimurae*, apparently replacing them on Kyushu.

4. *Hynobius vandenburghi* Dunn, new species

Diagnosis: A *Hynobius* with very flat tail; toes 5; medium series of vomerine teeth. Light, spotted with darker; sides of tail black, edges light.

Type: Bo. 26714, Mus. Cal. Acad. Sci., an adult male, collected May, 1911, by V. Kuhne.

Type-locality: Nara, Yamato Province, Hondo.

Remarks: This species is allied to *H. nebulosus* of Kyushu, which it replaces on Hondo.

5. *Hynobius ikishimæ* Dunn, new species

Diagnosis: A *Hynobius* with tail thick at base, flattened at tip; vomerine series of medium length; toes 5. Grayish-brown, with coarse black spots; edges of tail usually light, sides of tail not black.

Type: No. 26318, Mus. Cal. Acad. Sci., an adult male, collected October, 1910, by V. Kuhne.

Type-locality: Iki-shima, in the Korean straits.

Remarks: Allied to *H. nebulosus*, and to the species of the other islands in the Korean straits.

6. *Hynobius bicolor* Dunn, new species

Diagnosis: A *Hynobius* with a tail thick at base, flattened at tip; vomerine series of medium length; toes 5. Male usually black; female yellow, with coarse black spots; edges of tail yellow, the sides black.

Type: No. 26447, Mus. Cal. Acad. Sci., an adult male, collected October, 1910, by V. Kuhne.

Type-locality: Tsushima, South Island, in the Korean straits.

Remarks: Allied to the forms of Kyushu, Iki-shima, and Tsushima, North Island.

7. *Hynobius tagoi* Dunn, new species

Diagnosis: Similar to *H. bicolor* in structure, but brownish-gray, with fine dark stippling on whole dorsal surface.

Type: No. 26563, Mus. Cal. Acad. Sci., an adult male, collected October, 1910, by V. Kuhne.

Type-locality: Tsushima, North Island.

Remarks: The animals from the different islands in the Korean straits may be easily distinguished by the color characters which, though variable in the mass, are very constant in some of the details. Thus, none of the individuals from one island, although differing among themselves, ever looks like any individual from another island. This makes framing a diagnosis very difficult.